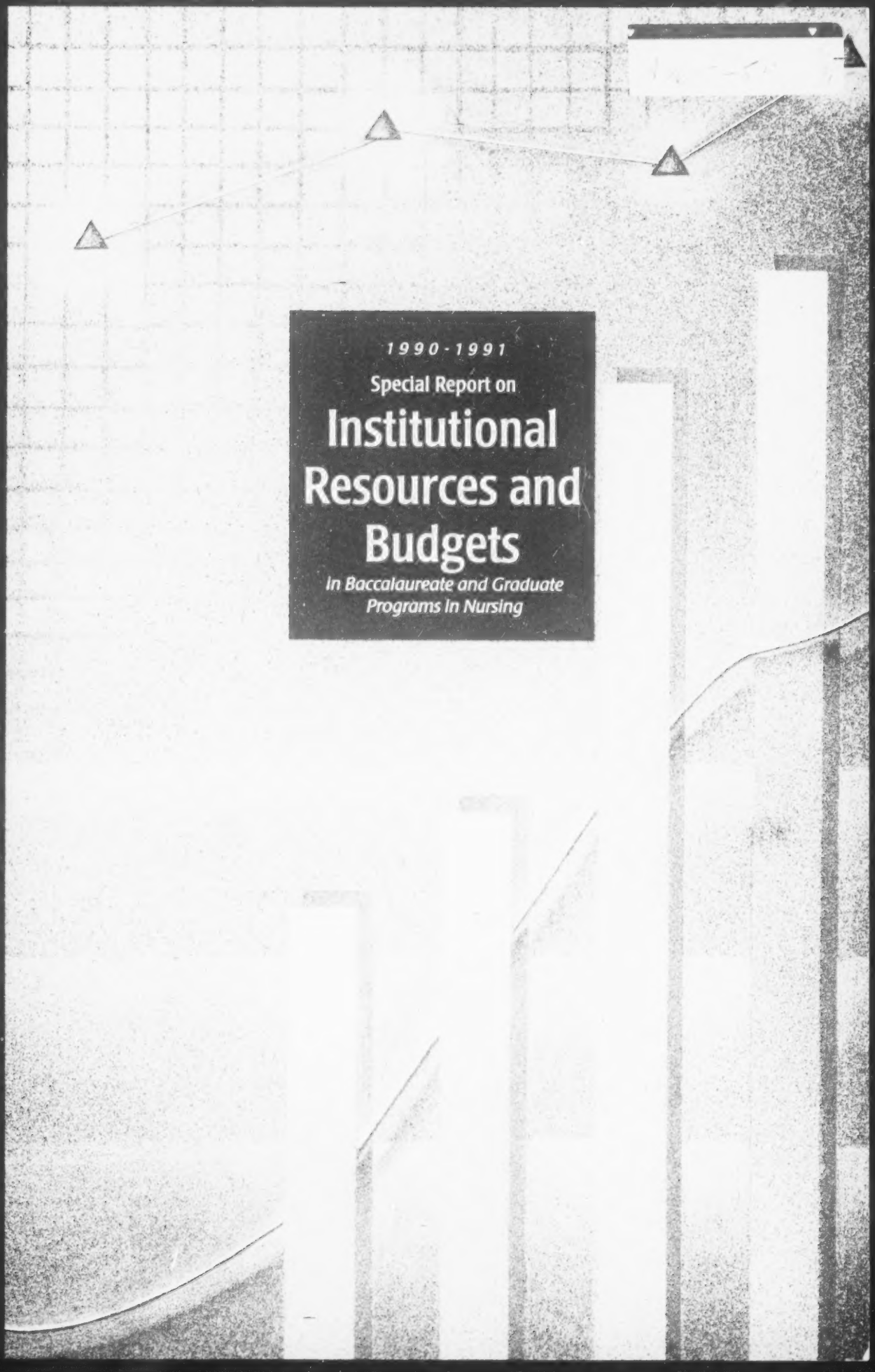
American Association
of Colleges of Nursing

1990-1991

Special Report on

Institutional Resources and Budgets

In Baccalaureate and Graduate Programs in Nursing



INSTITUTIONAL DATA SYSTEMS

1990-1991

SPECIAL REPORT ON

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IN

Baccalaureate and Graduate Programs in Nursing

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BACKGROUND

The American Association of Colleges of Nursing (AACN) represents 419 baccalaureate and higher degree programs in nursing. The mission of the Association has been to foster quality preparation of nurse clinicians, scientists, educators, administrators, consultants, and policy makers for leadership in nursing. The Data Bank Project, begun in 1978, was established to develop a database supportive of policy research and decision making by member institutions and the Association. This project formed the foundation for the Institutional Data System (IDS). IDS has gathered and published data annually on faculty and deans since 1978 and on enrollment and graduations since 1981. Data on administrative salaries were collected and published annually until 1984 when the decision was made to gather data for publication biennially.

Concern over the lack of information about financial and other resources in schools of nursing prompted an expansion of the 1990-91 IDS database to include questions on resources and budgets in baccalaureate and graduate programs in nursing. This special report includes information on faculty salary and operations budgets, externally funded grants and awards, nursing foundations, endowments, endowed chairs, computer facilities, faculty clinical practice, and nurse clinics.

METHODOLOGY

Survey Questionnaire

Five survey instruments were developed to gather information on: (1) characteristics of the institution within which the baccalaureate and higher degree nursing programs were located; (2) enrollment and graduations; (3) deans' salaries and related information; (4) full-time faculty salaries and related information; and (5) computer systems. The Computer Systems survey questionnaire can be obtained upon request from the Association. The questions about all other information included in this special report were integrated in the Institutional Data survey, which is included in the appendices of the publication entitled *1990-1991 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing.*

Survey forms were mailed to 618 (member = 415, nonmember = 203) baccalaureate and higher degree programs in nursing on September 5, 1990. Institutions that had not responded by the deadline (October 15) were sent reminder postcards on October 24 and November 20. Follow-up telephone calls to the remaining nonrespondents were made from December 4 to December 21.

Quality of Data

Data were edited twice for major reporting and processing errors. Frequency distributions were obtained on all variables in order to detect outliers and inconsistent data. Corrections were made using the data collection instruments. Inconsistent data were eliminated from the analysis.

Response Rates

Of the 618 survey forms mailed, 490 Computer Systems surveys (384 member and 106 nonmember) were returned, yielding a response rate of 79.3 percent. The response rate for faculty salary and operations budgets was 80.3 percent. General characteristics of budgets, externally funded grants/awards, gifts, nursing foundations, endowments, endowed chairs, faculty practice and nurse clinics yielded an overall response rate of 79.6 percent. All tables indicate the number of unreported values for each question.

RESULTS

A. Budgets in Baccalaureate and Graduate Programs in Nursing

1. General Characteristics of Budgets

Almost fifty-six percent of respondents reported the ability to move monies across budget categories without prior approval, while only 20.5 percent reported the ability to carry monies forward into the next fiscal year. One hundred fifty-four (32.4%) institutions reported formula funded budgets (Table 1).

Of the 145 institutions that received state appropriations, 78.6 percent (N = 114) of budgets included 76-100 percent state appropriated funds; 82 of the 114 were 100 percent financed by state funds. Grant and contract monies accounted for 25 percent or less of budgets in 56 of the 68 responding schools (82.3%). Only one institution reported that grant and contract awards accounted for greater than 50 percent of the total budget (Table 2).

2. Faculty Salary and Operations Budgets

Table 3 summarizes faculty salary, operations, and total budgets for member and nonmember schools for academic year 1990-91. The range or spread of the data on minimum and maximum budgets was considerable; therefore, median values are more meaningful than mean values. The median faculty salary budget was $546,649, with a range of values from $70,000 to $7,658,626; median operations budget was $57,802 with a range of values from $4,000 to $11,324,355. The range of values for the total budget was $82,310 to $18,983,981, with a median of $717,545. Member institutions reported higher median budgets than nonmember institutions.

3. Budgets Stratified by Selected Variables

The budgets for both member and nonmember schools are presented for parent institution, type of institution, academic health center, and type of program in Tables 4 through 7. Public institutions had the highest median faculty salary, operations, and total budget, followed by private secular and private religious institutions (Table 4). Universities reported higher median budgets than four-year colleges (Table 5). Faculty salary budgets were approximately 4.3 times higher in academic health centers than nonacademic health centers; operations and total budgets were 16.2 and 5.2 times higher, respectively (Table 6). As expected, institutions with a larger variety of programs had higher budgets (Table 7).

Table 1. General Characteristics of Budgets (N=492)

Characteristic	Number	Percent
Ability to move monies across budget categories		
Yes	268	55.8
No	212	44.2
Not reported	(12)	
Ability to carry monies forward to next fiscal year		
Yes	99	20.5
No	384	79.5
Not reported	(9)	
Formula funded budget		
Yes	154	32.4
No	322	67.6
Not reported	(16)	

Table 2. Percentage of State Appropriated Funds and Grant and Contract Monies in Total Budget

Percentage	Number	Percent
State funds (Valid N=145)		
≤ 25 %	7	4.8
26-50%	7	4.8
51-75%	17	11.8
76-100%	114	78.6
Grants and Contracts (Valid N=68)		
≤ 25 %	56	82.3
26-50%	11	16.2
> 50%	1	1.5

Table 3. Minimum, Maximum, Mean, and Median Faculty Salary and Operations Budgets by Membership Status, Academic Year, 1990-91 (N=496)

Category	Number of Schools	Minimum	Maximum	Mean	Median
Faculty Salary Budget					
Member	340	$85,400	$7,658,626	$1,046,803	$685,044
Nonmember	82	70,000	1,712,389	366,128	298,750
Total	422	70,000	7,658,626	914,539	546,649
Not reported	(74)				
Operations Budget					
Member	340	4,000	11,324,355	409,751	78,320
Nonmember	86	5,832	697,742	67,958	24,597
Total	426	4,000	11,324,355	340,751	57,802
Not reported	(70)				
Total Budget					
Member	338	96,880	18,983,981	1,485,955	840,051
Nonmember	80	82,310	1,345,834	421,966	334,121
Total	418	82,310	18,983,981	1,282,321	717,545
Not reported	(78)				

Table 4. **Minimum, Maximum, Mean, and Median Faculty Salary and Operations Budgets by Parent Institution and Membership Status, Academic Year, 1990-91 (N=496)**

Category	Number of Schools	Minimum	Maximum	Mean	Median
Faculty Salary Budget					
Public					
Member	193	$102,000	$7,658,626	$1,341,596	$982,120
Nonmember	35	134,740	1,712,389	494,569	410,000
Total	228	120,000	7,658,626	1,211,570	866,637
Private Secular					
Member	59	100,000	4,663,912	803,016	544,354
Nonmember	12	104,000	663,548	257,881	198,783
Total	71	100,000	4,663,912	710,881	466,801
Private Religious					
Member	86	85,400	2,856,139	564,796	439,230
Nonmember	35	70,000	633,057	274,800	227,730
Total	121	70,000	2,856,139	480,913	378,310
Other					
Member	2	526,189	1,034,424	517,212	517,212
Not reported	(74)				
Operations Budget					
Public					
Member	191	4,000	11,324,355	477,507	90,424
Nonmember	35	5,832	697,742	64,409	26,000
Total	226	4,000	11,324,355	413,532	67,901
Private Secular					
Member	60	8,000	5,053,920	498,423	78,661
Nonmember	13	8,000	226,299	48,973	20,472
Total	73	8,000	5,053,920	418,384	63,150
Private Religious					
Member	87	6,033	3,306,643	206,984	56,411
Nonmember	38	6,172	669,457	77,722	30,320
Total	125	6,033	3,306,643	167,688	45,000
Other					
Member	2	121,761	198,626	99,313	99,313
Not reported	(70)				
Total Budget					
Public					
Member	195	113,117	18,983,981	1,841,657	1,117,792
Nonmember	33	142,200	1,345,834	528,007	445,650
Total	228	113,117	18,983,981	1,651,524	974,211
Private Secular					
Member	59	112,000	7,934,000	1,309,867	702,000
Nonmember	12	112,000	961,847	316,021	285,232
Total	71	112,000	7,934,000	1,141,893	551,957
Private Religious					
Member	82	96,880	4,864,617	787,981	542,061
Nonmember	35	82,310	1,302,514	358,308	287,894
Total	117	82,310	4,864,617	659,446	427,040
Other					
Member	2	629,996	1,233,050	616,525	616,525
Not reported	(78)				

Table 5. **Minimum, Maximum, Mean, and Median Faculty Salary and Operations Budgets by Type of Institution and Membership Status, Academic Year, 1990-91 (N=496)**

Category	Number of Schools	Minimum	Maximum	Mean	Median
Faculty Salary Budget					
University					
Member	240	$122,516	$7,658,626	$1,291,210	$947,051
Nonmember	36	104,000	1,712,389	458,738	412,078
Total	276	104,000	7,658,626	1,182,627	820,277
Four-year College					
Member	95	85,400	1,958,189	445,324	385,750
Nonmember	42	70,000	963,908	289,353	226,835
Total	137	70,000	1,958,189	397,508	320,754
Other					
Member	5	139,000	1,593,067	743,342	526,189
Nonmember	4	250,673	435,297	338,772	334,558
Total	9	139,000	1,593,067	563,533	435,297
Not reported	(74)				
Operations Budget					
University					
Member	237	5,808	11,324,355	540,295	101,194
Nonmember	36	8,000	697,742	66,748	36,604
Total	273	5,808	11,324,355	477,849	89,846
Four-year College					
Member	98	4,000	1,622,836	110,262	41,425
Nonmember	46	5,832	669,457	52,041	17,021
Total	144	4,000	1,622,836	91,663	31,866
Other					
Member	5	22,600	185,100	91,990	77,322
Nonmember	4	26,000	548,025	261,889	236,766
Total	9	22,600	548,025	167,501	77,322
Not reported	(70)				
Total Budget					
University					
Member	239	167,396	18,983,981	1,866,184	1,190,000
Nonmember	34	112,000	1,345,834	493,573	452,890
Total	273	112,000	18,983,981	1,695,236	1,000,000
Four-year College					
Member	94	96,880	2,920,884	553,810	422,880
Nonmember	42	82,310	1,302,514	346,979	256,271
Total	136	82,310	2,920,884	489,936	381,046
Other					
Member	5	161,600	1,691,132	835,333	648,100
Nonmember	4	281,511	877,992	600,661	621,571
Total	9	161,600	1,691,132	731,034	648,100
Not reported	(78)				

Table 6. **Minimum, Maximum, Mean, and Median Faculty Salary and Operations Budgets by Academic Health Center and Membership Status, Academic Year, 1990-91 (N=496)**

Category	Number of Schools	Minimum	Maximum	Mean	Median
Faculty Salary Budget					
Academic Health Center					
Member	70	$122,516	$7,658,626	$2,275,633	$2,136,705
Nonmember	1	.	.	.	.
Total	71	122,516	7,658,626	2,252,498	2,115,370
Non-Academic Health Center					
Member	270	85,400	2,781,471	728,217	546,649
Nonmember	81	70,000	1,712,389	362,832	298,167
Total	351	70,000	2,781,471	643,897	492,300
Not reported	(74)				
Operations Budget					
Academic Health Center					
Member	70	36,000	11,324,355	1,370,870	770,659
Nonmember	1	.	.	.	.
Total	71	36,000	11,324,355	1,360,991	728,385
Non-Academic Health Center					
Member	270	4,000	2,074,838	160,572	51,078
Nonmember	85	5,832	697,742	60,881	23,195
Total	355	4,000	2,074,838	136,703	44,895
Not reported	(69)				
Total Budget					
Academic Health Center					
Member	72	411,000	18,983,981	3,642,201	3,051,057
Nonmember	1	.	.	.	.
Total	73	411,000	18,983,981	3,610,152	2,989,707
Non-Academic Health Center					
Member	266	96,880	4,055,101	902,309	685,994
Nonmember	79	82,310	1,345,834	410,820	326,575
Total	345	82,310	4,055,101	789,765	570,000
Not reported	(78)				

Table 7. **Minimum, Maximum, Mean, and Median Faculty Salary and Operations Budgets by Type of Program(s) Offered and Membership Status, Academic Year, 1990-91 (N=496)**

Category	Number of Schools	Minimum	Maximum	Mean	Median
Faculty Salary Budget					
Baccalaureate Only					
Member	151	$85,400	$1,825,548	$471,053	$426,085
Nonmember	72	70,000	963,908	322,856	280,607
Total	223	70,000	1,825,548	423,205	369,368
Baccalaureate, Master's					
Member	129	122,516	3,560,926	1,103,188	998,101
Nonmember	8	375,000	1,712,389	764,712	576,957
Total	137	122,516	3,560,926	1,083,423	968,478
Baccalaureate, Master's, Doctoral					
Member	47	542,190	7,658,626	2,680,518	2,345,439
Not reported	(89)				
Operations Budget					
Baccalaureate Only					
Member	153	4,000	1,153,314	91,217	38,261
Nonmember	76	5,832	697,742	72,106	26,662
Total	229	4,000	1,153,314	84,875	36,525
Baccalaureate, Master's					
Member	128	8,000	3,356,760	363,445	118,352
Nonmember	7	10,000	56,000	22,620	16,292
Total	135	8,000	3,356,760	345,772	100,834
Baccalaureate, Master's, Doctoral					
Member	47	67,500	11,324,355	1,446,565	818,066
Not reported	(85)				
Total Budget					
Baccalaureate Only					
Member	149	96,880	1,843,548	559,387	508,151
Nonmember	71	82,310	1,302,514	398,979	314,333
Total	220	82,310	1,843,548	507,619	426,900
Baccalaureate, Master's					
Member	129	164,375	6,739,899	1,513,701	1,215,362
Nonmember	7	385,000	1,345,834	653,378	552,325
Total	136	164,375	6,739,899	1,469,420	1,171,656
Baccalaureate, Master's, Doctoral					
Member	47	1,062,798	18,983,981	4,161,534	3,363,681
Not reported	(93)				

4. Capital Budgets

Two hundred seventeen institutions (44.6%) reported capital budgets that could be used to purchase equipment or construct facilities. Total amounts ranged from $833 to $900,000. The purchase of computer hardware and software was the most frequently stated use of these funds (76.5%), followed by laboratory equipment (25.9%), furniture and renovations (19.9%), interactive video and computer assisted instruction software (9%), and construction (0.6%) (Table 8).

B. Externally Funded Grants and Awards in Schools of Nursing

1. Types of Awards

Table 9 presents data on various externally funded grants and awards received by schools of nursing during academic year 1990-91. One hundred seventy schools received one or more training grants. Federal grants accounted for the largest number of awards (N=441), ranging from $1,500 to $1,024,391. The largest number of demonstration awards were from private sources, while the largest number of research awards were from the federal government. Twenty-three schools received 30 foundation awards, ranging from $2,475 to $1,180,000. Of note is that 6 schools received 10 awards from Area Health Education Center projects.

2. Federal and Foundation Awards by Institutional Characteristics

Table 10 summarizes federal and foundation awards by type of institution, parent institution, and academic health center. The majority of federal training, demonstration/ special projects, and research grants were received by public institutions; 68.8, 62.9, and 78.4 percent, respectively. Universities received noticeably more federal and foundation awards than four-year colleges. Excepting federal research grants, nonacademic health centers received higher percentages of federal and foundation monies than did academic health centers.

C. Nursing Foundations, Endowments, Endowed Chairs, and Gifts

Information about nursing foundations, endowments, endowed chairs, and gifts can be found in Table 11. Nursing foundations were reported in 69 (14.3%) of respondent institutions. Faculty inservice was the most frequent use of foundation funds (58%), followed by faculty travel and conferences (53.6%), research support (46.4%), student scholarship and assistance (37.7%), and capital expenditures (36.2%).

Endowments were received by 87 (18.2%) schools in academic year 1989-90; amounts ranged from $10,000 to $2,137,225 (median $219,822). Fifty-seven (11.7%) institutions reported endowed chairs, ranging from 1 to 6, with a median of 1 chair. The amounts contributed for these chairs ranged from $16,000 to $1,500,000 (median $604,632).

Almost 70% of schools reported financial gifts during the academic year 1989-90, ranging from $100 to $2,907,622 (median $10,325).

Table 8. Capital Budgets in Schools of Nursing, 1990-91 (N=496)

	Number	Percent
Capital Budget		
Yes	217	44.6
No	269	55.4
Not reported	(10)	
Total Capital Budget 1990-91 (N=173)		
Minimum	$833	
Maximum	$900,000	
Mean	$37,081	
Median	$11,500	
Not reported	(44)	
Use(s) of Capital Budget (N=166)		
Computer hardware and software	127	76.5
Laboratory equipment	43	25.9
Furniture and renovations	33	19.9
Interactive video and computer assisted instruction	15	9.0
Construction	1	0.6
Not reported	(51)	

Table 9. **Externally Funded Grants/Awards in Schools of Nursing, Academic Year 1990-91 (N=492)**

Type of Award	Number of Schools	Number of Awards	Minimum Award	Maximum Award
Training Grants (N=170 schools)				
Federal	170	441	$1,500	$1,024,391
State	1	2	5,034	45,353
Private	3	9	1,430	100,000
Nonprofit	2	3	45,173	1,250,000
Source not stated	2	7	8,278	420,000
Not indicated	(322)	(329)	(329)	
Demonstration/Special Projects Grants (N=65 schools)				
Federal	35	47	5,900	1,500,00
State	4	5	2,000	95,000
Private	36	53	750	668,116
Not indicated	(427)	(430)	(430)	
Research Grants (N=132 schools)				
Federal	74	308	3,126	1,600,000
State	3	5	30,000	240,000
Private	30	42	200	250,798
Nonprofit	89	227	200	940,172
Not indicated	(360)	(361)	(359)	
Foundation Awards (N=23 schools)	23	30	2,475	1,180,000
Not indicated	(469)	(467)	(465)	
Other (N=62 schools)				
AHEC projects [1]	6	10	4,000	48,000
Scholarships/fellowships	12	77	100	79,914
Other [2]	44	81	1,148	332,600
Not indicated	(430)	(429)	(427)	

[1] Area Health Education Center projects.
[2] Includes respondents not reporting the purpose of the grant/award.

Table 10. **Schools Receiving Federal and Foundation Awards During Academic Year 1990-91 by Institutional Characteristics**

Institutional Characteristic	Federal Training Grants (N=170 schools)		Federal Demonstration/ Special Projects Grants (N=35 schools)		Federal Research Grants (N=74 schools)		Foundation Awards (N=23 schools)	
	N	%	N	%	N	%	N	%
Public	117	68.8	22	62.9	58	78.4	17	73.9
Private Secular	27	15.9	7	20.0	9	12.2	0	
Private Religious	26	15.3	6	17.1	7	9.6	6	26.1
University	154	90.6	31	88.6	73	98.6	18	78.3
Four-year College	13	7.6	4	11.4	1	1.4	5	21.7
Other	3	1.8	0		0		0	
Academic Health Center	62	36.5	14	40.0	42	56.8	3	13.0
Non-Academic Health Center	108	63.5	21	60.0	32	43.2	20	87.0

Table 11. **Number and Percentage of Nursing Foundations, Endowments, Endowed Chairs, and Gifts (N=492)**

	Number	Percent
Nursing Foundation		
Yes [1]	69	14.3
No	413	85.7
Not reported	(10)	
Use of Foundation Funds (N=69)		
Faculty inservice	40	58.0
Faculty travel/conferences	37	53.6
Research support	32	46.4
Student scholarships, assistance, and awards	26	37.7
Capital expenditures	25	36.2
Other	12	17.4
Endowments		
Yes [2]	87	18.2
No	390	81.8
Not reported	(15)	
Endowed Chair(s)		
Yes [3]	57	11.7
No	430	88.3
Not reported	(5)	
Gifts		
Yes [4]	336	69.9
No	145	30.1
Not reported	(11)	

[1] Accrual as of June 30, 1990: Range of values $300-4,036,476; mean $320,650; median $14,803; valid N=54.

[2] Amount received in academic year 1989-90: Range of values $10,000-2,137,225; mean $219,822; median $67,090; valid N=58.

[3] Range of values 1-6; median 1; Range of amounts $16,000-1,500,000; mean $641,151; median $604,632; valid N=44.

[4] Range of values $100-2,907,622; mean $60,707; median $10,325; valid N=298.

D. Computer Facilities, Capabilities, and Usage

1. Computer Facilities and Software Applications

Table 12 summarizes computer facilities and capabilities in schools of nursing. Ninety-nine percent (N=486) of respondents reported having computer(s); 98 percent reported having one or more microcomputers, personal computers, and/or laptop computers. Fifty-three percent of schools had mainframe terminals and 36.2 percent had modems. Only 11 institutions had interactive video hardware. One or more electronic networks were reported in 137 schools (29.3%); BITNET was the most frequently reported type. When stratified by type of sponsorship, public institutions reported more computer facilities than private secular and private religious institutions (Table 13). The range and median number of hardware items for all respondents and by type and parent institution can be found in Tables 15, 13, and 14, respectively.

Word processing was the most frequently reported software application (99.4%), followed by database management (66.9%), spreadsheets (66.5%), statistical analyses (60.9%), and graphics (52.9%). Surprisingly, computer assisted instruction; interactive video, simulations, and/or tutorials; and bibliographic searches were reported infrequently (13.4, 4.3, and 1.8%, respectively) (Table 12).

2. Use of Computers by Students

The degree of computer use by students for computer assisted instruction, student research projects, and clinical rotations is summarized in Table 16. More than one-third of respondents did not utilize computers during clinical rotations and 8.8 percent of 456 respondents did not use any computer assisted instruction. More than 25 percent of respondents reported minimal use of computers for instructional purposes in all categories.

3. Comparison of 1987 and 1990 Computer Survey Data

The 1990 computer survey data were compared to 1987 data collected as part of the AACN *RN Baccalaureate Nursing Data Project* (Table 17). The percentage of schools with personal computers, modems, and electronic networks increased over the two time periods; there was also increased student use of computers for computer assisted instruction and research. However, there was a slight decrease of computer utilization during clinical rotations.

4. Availability of Courses in Computer Technology

Computer coursework was included either in the nursing curriculum or in other college/university courses in 91.5 percent of institutions; 221 (49.4%) respondent schools offered instruction in the nursing curriculum. Computer courses were unavailable in 38 (8.5%) responding institutions (Table 18).

Table 12. Description of Computer Facilities and Capabilities in Schools of Nursing (Respondents = 490)

	Number	Percent
Computer Facilities	486	99.2
Hardware Type(s) (N = 472)		
Microcomputer, PC, and/or laptop	462	97.9
Mainframe terminal	250	53.0
Modem	171	36.2
Dedicated word processor	19	4.0
Network system (LAN)	14	3.0
Interactive video	11	2.3
Other	11	2.3
Not reported	(14)	
Electronic Network (N = 468)	137	29.3
Not reported	(18)	
Network Type(s) (N = 135)		
BITNET	116	85.9
FITNET	18	13.3
INTERNET	13	9.6
ARPANET	10	7.4
Other	17	12.6
Not reported	(2)	
Software Applications (N = 486)		
Word processing	483	99.4
Database management	325	66.9
Spreadsheets	323	66.5
Statistical analyses	296	60.9
Graphics	257	52.9
Electronic communications	201	41.4
Desktop publishing	168	34.6
Computer assisted instruction	65	13.4
Interactive video, simulations, tutorials	21	4.3
Test construction/grading	12	2.5
Bibliographic searches	9	1.8
Other	5	1.1
Users of Facilities (N = 486)		
Faculty	452	93.0
Support personnel	452	93.0
Dean	394	81.1
Students	377	77.6
Administrative personnel	336	69.1
Other	18	3.7

Table 13. Schools Reporting Computer Facilities According to Type of Institution

Type(s) of Hardware/ Type of Institution	Number (%)	Valid N [1]	Number of Hardware Items	Range of Values	Median
Microcomputer, PC, and/or laptop (N=462)		429			
Public	249 (53.9)	231	7,130	1-284	16
Private Secular	74 (16.0)	66	1,023	1-92	6.5
Private Religious	137 (29.7)	130	1,300	1-75	6
Other	2 (0.4)	2	19	4-15	9.5
Mainframe terminal (N=250)		224			
Public	164 (65.6)	152	1,169	1-150	3
Private Secular	30 (12.0)	21	90	1-25	2
Private Religious	55 (22.0)	50	139	1-19	2
Other	1 (0.4)	1	3		
Modem (N=171)		148			
Public	113 (66.1)	100	670	1-90	2
Private Secular	30 (17.5)	22	78	1-15	2
Private Religious	28 (16.4)	26	69	1-14	1
Dedicated word processor (N=19)		18			
Public	8 (42.1)	8	34	1-11	2.5
Private Secular	4 (21.1)	4	9	1-5	1.5
Private Religious	7 (36.8)	6	8	1-2	1
Network system (LAN) (N=14)		14			
Public	10 (71.4)	10	18	1-7	1
Private Secular	3 (21.4)	3	3	1	1
Private Religious	1 (7.2)	1	1		
Interactive video (N=11)		11			
Public	7 (63.6)	7	14	1-3	2
Private Secular	2 (18.2)	2	3	1-2	1.5
Private Religious	2 (18.2)	2	6	1-5	3
Other (N=11)		11			
Public	9 (81.8)	9	59	1-43	1
Private Secular	1 (9.1)	1	4		
Private Religious	1 (9.1)	1	1		
Not reported (44)					

[1] The valid N and number of the type(s) of hardware will vary due to unreported data on the number of each type of hardware.

Table 14. Computer Facilities According to Parent Institution

Type(s) of Hardware/ Parent Institution	Number (%)	Valid N [1]	Number of Hardware Items	Range of Values	Median
Microcomputer, PC, and/or laptop (N=462)		429			
University	299 (64.7)	280	8,425	1-284	15.5
Four-year college	154 (33.3)	142	951	1-28	5
Other	9 (2.0)	7	96	2-24	15
Mainframe terminal (N=250)		224			
University	194 (77.6)	178	1,284	1-150	3
Four-year college	54 (21.6)	44	111	1-10	1.5
Other	2 (0.8)	2	6	2-4	3
Modem (N=171)		148			
University	138 (80.7)	122	767	1-90	2
Four-year college	29 (17.0)	24	47	1-10	1
Other	4 (2.3)	2	3	1-2	1.5
Dedicated word processor (N=19)		18			
University	13 (68.4)	13	44	1-11	2
Four-year college	6 (31.6)	5	7	1-2	1
Network system (LAN) (N=14)		14			
University	14 (100.0)	14	22	1-7	1
Interactive video (N=11)		11			
University	9 (81.8)	9	21	1-5	2
Four-year college	2 (18.2)	2	2	1	1
Other (N=11)		11			
University	9 (81.8)	9	62	1-43	1
Four-year college	1 (9.1)	1	1		
Other	1 (9.1)	1	1		
Not reported (44)					

[1] The valid N and number of the type(s) of hardware will vary due to unreported data on the number of each type of hardware.

Table 15. **Range and Median of Hardware Items Available in Schools of Nursing (N=486)**

Type(s) of Hardware	Valid N [1]	Number of Hardware Items	Range of Values	Median
Microcomputer, PC, and/or laptop	429	9,472	1-284	10
Mainframe terminal	224	1,401	1-150	2
Modem	148	817	1-90	2
Dedicated word processor	18	51	1-11	1.5
Network system (LAN)	14	22	1-7	1
Interactive video	11	23	1-5	2
Other	67	64	1-43	1
Not reported	(44)			

[1] The valid N and the numbers reported in Table 12 will vary due to unreported data on the number of each type of hardware.

Table 16. **Degree of Use of Computers by Nursing Students According to Instructional Purpose Categories (N=486)**

Purpose	Number	Minimal Use N %	Moderate Use N %	Extensive Use N %	Not Used N %
Computer assisted instruction	456	156 (34.2)	193 (42.3)	67 (14.7)	40 (8.8)
Student research projects	440	125 (28.4)	158 (35.9)	95 (21.6)	62 (14.1)
Clinical rotations:					
Information systems	430	109 (25.4)	127 (29.5)	38 (8.8)	156 (36.3)
Patient monitoring systems	420	111 (26.4)	107 (25.5)	28 (6.7)	174 (41.4)
Patient care plans	422	112 (26.5)	95 (22.5)	31 (7.4)	184 (43.6)
Not reported	(26)				

Table 17. Comparison of Computer Systems Surveys, 1987 [1] and 1990

	1987		1990	
	Number of Schools	Percent	Number of Schools	Percent
Hardware				
Personal computers	349/461	75.7	462/472	97.9
Modem	125/461	27.1	171/472	36.2
Electronic Network	30/461	6.5	137/468	29.3
Student Use of Computers				
Computer assisted instruction	373/447	83.4	416/456	91.2
Research projects	315/442	71.3	378/440	85.9
Clinical rotations:				
Information systems	287/436	65.8	274/430	63.7
Patient monitoring systems	256/434	59.0	246/420	58.6
Patient care plans	270/437	61.8	238/422	56.4

[1] *RN Baccalaureate Nursing Data Project*, AACN.

Table 18. Availability of Computer Courses in Schools of Nursing (N=486)

Instruction	Number	Percent
Available in nursing courses	221	49.4
Available in other university/college coursework	388	86.8
Available in either nursing or other university/college courses	409	91.5
Courses not available	38	8.5
Not reported	(39)	

E. Faculty Clinical Practice

1. Characteristics of Faculty Clinical Practice

Table 19 summarizes selected characteristics of faculty clinical practice. Sixty-four percent of respondent institutions had faculty with clinical practices independent of the clinical supervision of students. It is interesting to note that 18 percent of respondents did not know if faculty members had clinical practices. The total number of practicing faculty comprised 24.2 percent of full- and part-time faculty. Eleven percent (N=53) of respondents had written practice plans. Faculty practice was required in 17 (32.7%) of these schools and practice was a consideration for promotion in 31 (64.6%) of the schools. Over one-half (56.7%) of respondents had no policies regarding faculty clinical practice.

2. Faculty Practice Requirements by Promotion and Tenure

Table 20 summarizes the relationship between faculty practice requirements by promotion and tenure. The discordant cells are of particular interest. Eighteen respondents did not require clinical practice but considered practice in promotion and tenure. More striking, however, is that five respondents requiring faculty clinical practice did not consider it in promotion and tenure.

3. Institutions with Practicing Faculty by Type of Institution, Parent Institution, and Academic Health Center

Number and percentages of institutions with faculty involved in clinical practice according to type of institution, parent institution, and academic health center affiliation are found in Table 21.

F. Nurse Clinics/Centers Administered and Operated by Schools of Nursing

1. Number of Clinics and Personnel

Nurse clinics/centers were reported in 76 (15.6%) of responding institutions. Clinic staff members consisted of one or more of the following groups: (1) faculty (94.7%); (2) students (75%); and (3) others (40.8%). Other staff members included nurses, nurse clinicians, nurse practitioners, clinical support staff, and volunteers (Table 22). A matrix of various staffing patterns can be found in Table 23.

2. Sources of Support for Nurse Clinics

The minimum and maximum percentages of financial and other support for the 76 clinics administered and operated by schools of nursing is summarized in Table 24. Twenty-one clinics received total support from one source; 11 (52.3%) were financed by internal school of nursing resources, 8 (38.1%) by grants, and 1 (4.8%) received free space. The remaining clinic (4.8%) was supported by contract monies. Eighteen, 15, and 3 clinics received support from 2, 3, and 4 sources of support, respectively. One clinic reported 5 sources of support. The remaining 18 clinics did not report sources of support.

Table 19. Characteristics of Faculty Clinical Practice (N=492)

	Number	Percent
Institutions with Practicing Faculty (N=492)		
Yes	296	64.2
No	82	17.8
Not known	83	18.0
Not reported	(31)	
Faculty with Clinical Practice	1,546	24.2 *
Written Practice Plans (N=492)		
Yes	53	11.0
No	431	89.0
Not reported	(8)	
Faculty Practice Required (N=53)		
Yes	17	32.7
No	35	67.3
Not reported	(1)	
Practice Considered for Promotion (N=53)		
Yes	31	64.6
No	17	35.4
Not reported	(5)	
Policies Regarding Faculty Clinical Practice		
No policies	279	56.7
Income returned to schools	22	4.5
Faculty keep income	118	24.0
Faculty benefit indirectly from income	20	4.1
Use own time for practice	87	17.7
Release time for practice	53	10.8
Given free practice space	33	6.7
Pay for practice space	6	1.2

* Percent of full- and part-time faculty.

Table 20. Faculty Practice Requirements by Consideration in Promotion and Tenure

Practice Required	Considered in Promotion and Tenure		
	Yes	No	Total
Yes	12	5	17
No	18	12	30
Total	30	17	47

Missing = 6

Table 21. **Number of Percentage of Institutions with Faculty Involved in Clinical Practice Stratified by Institutional Characteristics**

Characteristic	Number	Percent
Public		
Yes	150	60.0
No	37	14.8
Not known	63	25.2
Not reported	(9)	
Private Secular		
Yes	55	75.3
No	11	15.1
Not known	7	9.6
Not reported	(9)	
Private Religious		
Yes	90	66.2
No	33	24.3
Not known	13	9.5
Not reported	(13)	
University		
Yes	181	60.9
No	48	16.2
Not known	68	22.9
Not reported	(17)	
Four-year College		
Yes	111	71.2
No	33	21.1
Not known	12	7.7
Not reported	(12)	
Academic Health Center		
Yes	43	63.2
No	3	4.4
Not known	22	32.4
Not reported	(8)	
Non-Academic Health Center		
Yes	253	64.4
No	79	20.1
Not known	61	15.5
Not reported	(23)	

Table 22. **Nurse Clinics/Centers Administered and Operated by Schools of Nursing (N=492)**

Type of Institution	Number	Percent
Nurse Clinic		
Yes	76	15.6
No	411	84.4
Not reported	(5)	
Clinic Staff (N=76 clinics)		
Faculty	72	94.7
Students	57	75.0
Other [1]	31	40.8

[1] Includes staff nurses, nurse clinicians, nurse practitioners, clinical support staff, and volunteers.

Table 23. **Matrix of Various Combinations of Staff Involved in Nurse Clinics/Centers (N=76)**

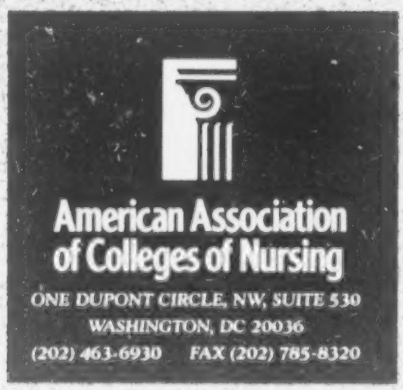
	Faculty	Students	Other	All 3
Faculty	13 (17.1)	31 (40.8)	3 (3.9)	---
Students	---	1 (1.4)	0	---
Other [1]	---	---	3 (3.9)	---
All 3	---	---	---	25 (32.9)

[1] Includes staff nurses, nurse clinicians, nurse practitioners, clinical support staff, and volunteers.

Table 24. **Sources of Support and Minimum and Maximum Percentages of Support for Nurse Clinics/Centers**

Source(s) of Support	Number of Clinics	Percent	Minimum %	Maximum %
Percentage Support (Valid N=58)				
% Internal SON resources	40	69.0	10.0	100
% Fee for service	28	48.3	0.5	95
% Grant	22	37.9	10.0	100
% Free space	17	29.3	3.0	100
% Other [1]	12	20.7	1.0	100
Not reported	(18)			
100% Support From One Source (N=21)				
Internal SON resources	11	52.3		
Grant	8	38.1		
Free space	1	4.8		
Other	1	4.8		
100% Support From Two Sources (N=18)				
Fee for service & internal SON resources	8	44.3		
Fee for service & grant	2	11.1		
Fee for service & free space	2	11.1		
Internal SON resources & other	2	11.1		
Fee for service & other	1	5.6		
Grant & internal SON resources	1	5.6		
Free space & internal SON resources	1	5.6		
Free space & other	1	5.6		
100% Support From Three Sources (N=15)				
Fee for service, free space, & internal SON resources	5	33.2		
Fee for service, grant, & internal SON resources	4	26.6		
Fee for service, internal SON resources, & other	1	6.7		
Fee for service, free space, & other	1	6.7		
Fee for service, grant, & other	1	6.7		
Grant, free space, & internal SON resources	1	6.7		
Grant, internal SON resources, & other	1	6.7		
Free space, internal SON resources, & other	1	6.7		

[1] Includes primarily contracts, gifts, and university/college funds.



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